Rec'd PCT 18 OCT 2004/iai 2003

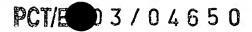
# **PCT**

#### REQUEST

The undersigned requests that the present international application be processed according to the Patent Cooperation Treaty.

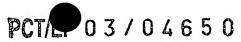
### PCT/EP 0 3 / 0 4 6 5 0 International Application No. 02 05 2003 0 2 MAY 2003 International Filing Date **EUROPEAN PATENT OFFICE** PCT INTERNATIONAL APPLICATION Name of receiving Office and "PCT International Application"

•	Applicant's or agent's (if desired) (12 charact	file reference ers maximum) 28	050P WO					
Box No. I TITLE OF INVENTION								
Proteins involved in the regulation of energy homeostasis								
Box No. II APPLICANT This perso	n is also inventor							
Name and address: (Family name followed by given name; for a legal ent The address must include postal code and name of country. The country of t Box is the applicant's State (that is, country) of residence if no State of residen	Telephone No.							
DeveloGen Aktiengesellschaft für	Facsimile No.							
entwicklungsbiologische Forschung Rudolf-Wissell-Str. 28	Teleprinter No.							
37079 Göttingen		Applicant's registration No. with the Office						
State (that is, country) of nationality: DE	State (that is, country) DE	of residence:						
This person is applicant for the purposes of:  all designated states all designated the United States	d States except tates of America	the United States of America only	the States indicated in the Supplemental Box					
Box No. III FURTHER APPLICANT(S) AND/OR (FURT	HER) INVENTOR(S)							
Name and address: (Family name followed by given name; for a legal ent The address must include postal code and name of country. The country of Box is the applicant's State (that is, country) of residence if no State of residen EULENBERG Karsten Vom-Stein-Str. 29 37120 Bovenden DE	This person is:  applicant only  applicant and inventor  inventor only (If this check-box is marked, do not fill in below.)  Applicant's registration No. with the Office							
State (that is, country) of nationality: DE	State (that is, country) DE	of residence:						
This person is applicant for the purposes of:  all designated all designate the United States	d States except tates of America	the United States of America only	the States indicated in the Supplemental Box					
Further applicants and/or (further) inventors are indicated or	on a continuation sheet.		·					
Box No. IV AGENT OR COMMON REPRESENTATIVE	; OR ADDRESS FOR	CORRESPOND	ENCE					
The person identified below is hereby/has been appointed to act of the applicant(s) before the competent International Authorities	on behalf as:	agent	common representative					
Name and address: (Family name followed by given name; for a legal enti The address must include postal code and name of ca	Telephone No. 089/455 63-0							
WEICKMANN & WEICKMANN	Facsimile No.							
Postfach 860 820	089/455 63	3-999						
81635 München		Teleprinter No.						
DE .		Agent's registrat	ion No. with the Office					
Address for correspondence: Mark this check-box where space above is used instead to indicate a special address to	no agent or common rep which correspondence s	resentative is/has hould be sent.	been appointed and the					



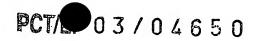
Sheet No. ...?.

Continuation of Box No. III FURTHER APPLICANT(S) A	ND/OR (FURTHER) INVENTOR(S)
If none of the following sub-boxes is used, this sheet should not	t be included in the request.
Name and address: (Family name followed by given name; for a legal entity The address must include postal code and name of country. The country of the Box is the applicant's State (that is, country) of residence if no State of residence of STEUERNAGEL Arnd Am Kirschberge 4 37085 Göttingen DE	applicant only  applicant and inventor inventor only (If this check-box is marked, do not fill in below.)  Applicant's registration No. with the Office
State (that is, country) of nationality:  DE	State (that is, country) of residence: DE
This person is applicant all designated for the purposes of:	States except the United States of America only the States indicated in the Supplemental Box
Name and address: (Family name followed by given name; for a legal entity. The address must include postal code and name of country. The country of the Box is the applicant's State (that is, country) of residence if no State of residence if the State of the State o	e address indicated in this
State (that is, country) of nationality: DE	State (that is, country) of residence: DE
This person is applicant all designated all designated for the purposes of:	States except ates of America only the United States indicated in the Supplemental Box
Name and address: (Family name followed by given name; for a legal entity The address must include postal code and name of country. The country of the Box is the applicant's State (that is, country) of residence if no State of residence MEISE Martin An der Tränke 10 37079 Göttingen DE	e address indicated in this
State (that is, country) of nationality: DE	State (that is, country) of residence: DE
	States except the United States of America only the States indicated in the Supplemental Box
Name and address: (Family name followed by given name; for a legal entity. The address must include postal code and name of country. The country of the Box is the applicant's State (that is, country) of residence if no State of residence and name of country. The country of the Box is the applicant's State (that is, country) of residence if no State of residence and BRÖNNER Günter Springstr. 54 37077 Göttingen DE	e address indicated in this
State (that is, country) of nationality: DE	State (that is, country) of residence: DE
	States except the United States the States indicated in the States of America only the Supplemental Box
Further applicants and/or (further) inventors are indicated or	n another continuation sheet.



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			ragua																			

Precautionary Designation Statement: In addition to the designations made above, the applicant also makes under Rule 4.9(b) all other designations which would be permitted under the PCT except any designation(s) indicated in the Supplemental Box as being excluded from the scope of this statement. The applicant declares that those additional designations are subject to confirmation and that any designation which is not confirmed before the expiration of 15 months from the priority date is to be regarded as withdrawn by the applicant at the expiration of that time limit. (Confirmation (including fees) must reach the receiving Office within the 15-month time limit.)



Supplemental Box

If the Supplemental Box is not used, this sheet should not be included in the request.

#### "ADDITIONAL REPRESENTATIVES"

Names

Dipl.-Ing. Dipl.-Chem.

Dr.-Ing.

Dipl.-Phys. Dr. Dipl.-Chem. Dr. Dipl.-Chem. Dr.

Dipl.-Phys. Dr.

Dipl.-Phys. Dr. Dipl.-Phys.

Dipl.-Phys. Dr.-Ing. Dipl.-Chem. Dr.

Franz Albert Weickmann

Bernhard Huber

Horst Liska

Jörg Prechtel Brigitte Böhm Wolfgang Weiß

Johannes Tiesmeyer

Markus Herzog

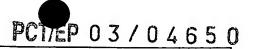
Bernhard Ruttensperger

Volker Jordan Michael Dey

Sheet	No.		.5	

PCT/EP 03/04650

Box No. VI PRIORITY CLAIM							
The priority of the following	earlier application(s) is herel	by claimed:					
Filing date	Number	V	Where earlier application	is:			
of earlier application (day/month/year)	of earlier application	national application: country or Member of WTO	regional application:* regional Office	international application: receiving Office			
item (1) May 02, 2002 <b>0 2 (5, 02</b> )	02 009 883.6		EP				
item (2) May 07, 2002 (07, 05, 02)	02 010 332.1		EP				
May 16, 2002	02 010 948.4 )		EP				
item (4)							
item (5)							
Further priority claims a	are indicated in the Suppleme	ental Box.					
The receiving Office is reque if the earlier application was for above as:	sted to prepare and transmit t filed with the Office which for	to the International Bureau the purposes of this interna	1 a certified copy of the entional application is the r	earlier application(s) (only receiving Office) identified			
all items item (	1) item (2)	item (3) item	(4) item (5)	other, see Supplemental Box			
* Where the earlier applicatio Industrial Property or one Me	n is an ARIPO application, in ember of the World Trade Or	ıdicate at least one country ganization for which that e	party to the Paris Conve earlier application was fil	ention for the Protection of led (Rule 4.10(b)(ii)):			
Box No. VII INTERNATI	IONAL SEARCHING AUT	ГНОRITY					
Choice of International Sea international search, indicate	rching Authority (ISA) (if the Authority chosen; the two	wo or more International S o-letter code may be used):	Searching Authorities are	competent to carry out the			
ISA /	, <b></b>						
Request to use results of ear International Searching Author				it by or requested from the			
Date (day/month/year):	Numb	er Coun	ntry (or regional Office)				
Box No. VIII DECLARAT	TIONS						
	The following declarations are contained in Boxes Nos. VIII (i) to (v) (mark the applicable  Number of check-boxes below and indicate in the right column the number of each type of declaration):  Number of declarations						
Box No. VIII (i)	Declaration as to the identity	y of the inventor		÷			
Box No. VIII (ii)	Declaration as to the applic date, to apply for and be gr		e international filing	:			
Box No. VIII (iii)	Declaration as to the applie date, to claim the priority of		he international filing	:			
Box No. VIII (iv)	Declaration of inventorship United States of America)	o (only for the purposes of	f the designation of the	:			
Box No. VIII (v)	Declaration as to non-preju	idicial disclosures or exce	ptions to lack of novelty	:			

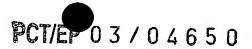


Box No. VIII (iv) DECLARATION: INVENTORSHIP (only for the purposes of the designation of the United States of America) The declaration must conform to the following standardized wording provided for in Section 214; see Notes to Boxes Nos. VIII, VIII (i) to (v) (in general) and the specific Notes to Box No. VIII (iv). If this Box is not used, this sheet should not be included in the request.

## Declaration of inventorship (Rules 4.17(iv) and 51bis,1(a)(iv))

for the purposes of the designation	of the United States of America:							
I hereby declare that I believe I am the original, first and sole (if only is listed below) inventor of the subject matter which is claimed and	I hereby declare that I believe I am the original, first and sole (if only one inventor is listed below) or joint (if more than one inventor is listed below) inventor of the subject matter which is claimed and for which a patent is sought.							
This declaration is directed to the international application of which it forms a part (if filing declaration with application).								
This declaration is directed to international application No. PCT/ to Rule $26ter$ ).	(if furnishing declaration pursuant							
I hereby declare that my residence, mailing address, and citizenship	are as stated next to my name.							
hereby state that I have reviewed and understand the contents of the above-identified international application, including the claims of said application. I have identified in the request of said application, in compliance with PCT Rule 4.10, any claim to foreign priority, and I have identified below, under the heading "Prior Applications," by application number, country or Member of the World Trade Organization, day, month and year of filing, any application for a patent or inventor's certificate filed in a country other than the United States of America, including any PCT international application designating at least one country other than the United States of America, naving a filing date before that of the application on which foreign priority is claimed.								
Prior Applications: .EP. 02 009 883.6 of May 02, 2002; EP. 02 010 332.1 of May 07, 2002 and								
I hereby acknowledge the duty to disclose information that is known by me to be material to patentability as defined by 37 C.F.R. § 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the PCT international filing date of the continuation-in-part application.								
I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.								
Name: Eulenberg Karsten								
Residence: Bovenden, Germany (city and either US state, if applicable, or country)								
Mailing Address: Vom-Stein-Str. 29, 37120 Bovenden, Ger	rmany							
Citizenship: DE								
Inventor's Signature:	Date:							
Name: Steuernagel Arnd								
Residence:  City and either US state, if applicable, or country)								
Mailing Address: Am Kirschberge 4, 37085 Göttingen, Germany								
Citizenship: DE								
Inventor's Signature:	Date:							

This declaration is continued on the following sheet, "Continuation of Box No. VIII (iv)".



Continuation of Box No. VIII (i) t	to (v) DI	ECLAR A	ATION
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If the space is insufficient in any of Boxes Nos. VIII (i) to (v) to furnish all the information, including in the case where more than two inventors are to be named in Box No. VIII (iv), in such case, write "Continuation of Box No. VIII ..." (indicate the item number of the Box) and furnish the information in the same manner as required for the purposes of the Box in which the space was insufficient. If additional space is needed in respect of two or more declarations, a separate continuation box must be used for each such declaration. If this Box is not used, this sheet should not be included in the request.

Name: Häder Thomas	
Residence: Göttingen, Germany (city and either US state, if applicable, or country)	
Mailing AddresWiesenstr17.,37.073Gö	<u> </u>
• •	
Citizenship: German	
Inventor's Signature:	Date:
Meise Martin	••••••
Residence: Göttingen, Germany (city and either US state, if applicable, or country)	
Mailing Address: An. der. Tränke · 10., · · 37.07	9. Göttingen: Germany
Citizenship: German	
-	
Inventor's Signature: (if not contained in the request, or if declaration is corrected or added under Rule 26ter after the filing of the international application. The signature must be that of the inventor, not that of the agent)	Date:
Name: Brönner Günter  Residence: Göttingen, Germany (city and either US state, if applicable, or country)  Mailing Address: Springstr. 54, 37077 (	
·	·····
Citizenship:German	•••••••••••••••••••••••••••••••••••••••
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Name:	
Residence:	
Mailing Address:	
Citizenship:	
	Date:
Inventor's Signature:  (if not contained in the request, or if declaration is corrected or added under Rule 26ter after the filing of the international application. The signature must be that of the inventor, not that of the agent)	(of signature which is not contained in the request, or of the declaration that is corrected or added under Rule 26ter after the filing of the international application)
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Sheet	NO.		-	

Box No. IX CHECK LIST; LANGUAGE OF FILING						
This international application contains:  (a) in paper form, the following number of sheets:	This international application is accompanied by the following item(s) (mark the applicable check-boxes below and indicate in right column the number of each item):	Number of items				
request (including	1. X fee calculation sheet	•				
declaration sheets) : 8	2.  original separate power of attorney	:				
description (excluding sequence listings and/or	3.  original general power of attorney	:				
tables related thereto) : 64	4. copy of general power of attorney; reference number.					
claims : 8	if any:	:				
abstract : 1	5. statement explaining lack of signature	:				
drawings : 51	6. ☐ priority document(s) identified in Box No. VI as item(s):	:				
Sub-total number of sheets: 132 sequence listings:	7. Translation of international application into (language):	:				
tables related thereto :  (for both, actual number of	8. separate indications concerning deposited microorganism or other biological material	ı .				
sheets if filed in paper form, whether or not also filed in	9. sequence listings in computer readable form (indicate type and number of carriers)	·				
computer readable form; see (c) below)	(i) copy submitted for the purposes of international search Rule 13ter only (and not as part of the international ap	n under				
Total number of sheets : 132  (b) only in computer readable form	(ii) only where check-box (b)(i) or (c)(i) is marked in left col additional copies including, where applicable, the coppurposes of international search under Rule 13ter	umn)				
(Section 801(a)(i)) (i) sequence listings	(iii) together with relevant statement as to the identity of the copies with the sequence listings mentioned in left columns.	e copy or				
(ii) ☐ tables related thereto (c) ☐ also in computer readable form	10.  tables in computer readable form related to sequence listin (indicate type and number of carriers)					
(Section 801(a)(ii)) (i) □ sequence listings	<ul> <li>(i) ☐ copy submitted for the purposes of international search Section 802(b-quater) only (and not as part of the international)</li> </ul>	n under mational				
(ii) tables related thereto	application)	:				
Type and number of carriers (diskette, CD-ROM, CD-R or other) on which are contained the	<ul> <li>(ii) (iii) (iv) (iv) (iv) (iv) (iv) (iv)</li></ul>	y for the				
sequence listings:	(iii) together with relevant statement as to the identity of th					
tables related thereto:	copies with the tables mentioned in left column	:				
(additional copies to be indicated under items 9(ii) and/or 10(ii), in right column)	11.  other (specify):	····· :				
Figure of the drawings which should accompany the abstract:	Language of filing of the international application: english					
Box No. X SIGNATURE OF APPLICANT	r, AGENT OR COMMON REPRESENTATIVE					
Next to each signature, indicate the name of the person sign	ning and the capacity in which the person signs (if such capacity is not obvious from	n reading the request).				
15(8)						
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Dr. W. We	0 2. Mai 2003					
	— For receiving Office use only					
Date of actual receipt of the purported international application:		. Drawings:				
3. Corrected date of actual receipt due to later b timely received papers or drawings completing the purported international application:		Teceiveu.				
4. Date of timely receipt of the required corrections under PCT Article 11(2):		not received:				
5. International Searching Authority (if two or more are competent): ISA /	6. Transmittal of search copy delayed until search fee is paid					
	For International Bureau use only					
Date of receipt of the record copy by the International Bureau:						